

PATENT SPECIFICATION

Application Date: Jan. 15, 1941. No. 540/41.

544.383

„ „ July 11, 1941. No. 8791/41.

One Complete Specification Left: Jan. 14, 1942.

(Under Section 16 of the Patents and Designs Acts, 1907 to 1939).

Specification Accepted: April 10, 1942.



PROVISIONAL SPECIFICATION

No. 540 A.D. 1941.

Improvements in and relating to a Chin Strap for a Helmet or the like

We, LASTEX YARN AND LACTRON THREAD LIMITED, a British Company, of Dunlop House, 1, Albany Street, in the County of London, and HARRY CLARKE WESLEY, a British Subject, of the aforesaid Company's Works, at St. Mary's Mills, Leicester, do hereby declare the nature of this invention to be as follows:—

10 This invention comprises improvements in and relating to a chin strap for a helmet or the like and more particularly is concerned with the method and means whereby the chin strap is adjustably connected to the helmet.

15 The object of the present invention is to dispense with, as far as possible, metal parts such as the closed links hitherto commonly employed for connecting a chin strap to a helmet and also the metal buckle or slide hitherto commonly provided as a means for adjusting the length of the strap, this being desirable particularly in circumstances where the availability of such metal parts is restricted or even ceases as occasioned by the exigencies of war.

20 In dispensing with the aforesaid metal parts it is of course, desirable to retain the facility for adjusting the strap in relation to the helmet to regulate it to the desirable fit to the individual wearer, and it is a further object of this invention to provide a construction embodying 35 arrangements for permitting such adjustment.

According to this invention a chin strap for a helmet or the like comprises a length of elastic or non-elastic webbing each end of which is secured to an extension tab of suitable material such as canvas reinforced rubber sheet of convenient size and shape to present a plurality of slits or slots disposed within the area of the tab and spaced lengthwise of and located transverse of the length of the strap.

Thus, by means of a selected slit or slot each tab may be detachably engaged with a lug or hook part secured to or integral with, and extending internally from, the inner adjacent wall of the helmet.

It will be apparent that by varying the selected slit or slot for engagement with the lug or hook part there is obtained an adjustment of the strap with respect to its "fit" around the chin of the wearer.

Furthermore no metal parts are involved either for attaching the strap to the helmet or in providing for adjustment of the strap to correctly embrace the wearer's chin.

The herein referred to method and means for detachably and adjustably securing a chin strap to a helmet may be varied in detail without departing from the nature of the invention.

Dated the 11th day of January, 1941.

M. F. COOP,

Acting for the Applicants.

PROVISIONAL SPECIFICATION

No. 8791 A.D. 1941.

Improvements in and relating to a Chin Strap for a Helmet or the like

We, LASTEX YARN AND LACTRON THREAD LIMITED, a British Company, of 1, Albany Street, in the County of London, and HARRY CLARKE WESLEY, a British Subject, of the aforesaid Company's Works, at St. Mary's Mills,

[Price 1/-]

Leicester, do hereby declare the nature of this invention to be as follows:—

This invention comprises improvements in and relating to a chin strap for a helmet or the like and more particularly is concerned with the method and means whereby the chin strap is adjustably connected to the helmet.

The object of the present invention is to dispense with, as far as possible, metal parts such as the closed links hitherto commonly employed for connecting a chin strap to a helmet and also the metal buckle or slide hitherto commonly provided as a means for adjusting the length of the strap, this being desirable particularly in circumstances where the availability of such metal parts is restricted or even ceases as occasioned by the exigencies of war.

In dispensing with the aforesaid metal parts, it is of course, desirable to retain the facility for adjusting the strap in relation to the helmet to regulate it to the desirable fit to the individual wearer, and it is a further object of this invention to provide a construction embodying arrangements for permitting such adjustment.

According to this invention a chin strap for a helmet or the like comprises a length of elastic or non-elastic webbing each end of which is secured to an extension tab of suitable material such as canvas reinforced rubber sheet or leather of convenient size and shape to present a plurality of slits or slots disposed within the area of the tab and spaced and located lengthwise of the strap.

Alternatively a chin strap comprises a length of sheet rubber, preferably of a particularly tough nature, the ends of which have a plurality of slits or slots disposed within the superficial area and spaced lengthwise of the strap. Some of the slits or slots may be arranged to extend lengthwise of the strap and others may be disposed at an angle, for example

approximately 45 degrees to the longitudinal edge of the strap whereby attachment of the strap to the helmet correctly utilising these latter slits facilitates the wearing of the strap around the back of the head.

A securing bar, which may consist of a short length of suitable gauge wire, is employed in conjunction with the slits or slots and a tubular lug or closed eye on the helmet, the arrangement being that the chin strap is positioned so that the tubular lug or the like is in alignment with a pair of slits or slots and displaces the material between the slits or slots so that the latter are opened and the securing bar can be inserted through the slits or slots and the tubular lug or the like, to thus effect the attachment of the strap to the helmet.

One or both ends of the securing bar may be bent to embrace the side or sides of the tab, to give support and security.

Thus by means of a selected pair of slits or slots each tab may be attached by the securing bar to a lug or hook secured to or integral with, and extending internally from, the inner adjacent wall of the helmet.

It will be apparent that by varying the selected pair of slits or slots for attachment by the securing bar to the lug or the like, there is obtained an adjustment of the strap with respect to its "fit" around the chin of the wearer.

In a modified arrangement each extension tab is provided with a plurality of holes disposed within its area and attachment to the helmet is by engagement of the tab, by one of these holes, with a stud carried by means such as a second tab secured to the helmet as by rivetting.

The holes are spaced lengthwise of the tab to provide for adjustment of the effective length of the strap.

Dated this 9th day of July, 1941.

W. BOND,

Acting for the Applicants.

COMPLETE SPECIFICATION

Improvements in and relating to a Chin Strap for a Helmet or the like

We, LASTEX YARN AND LACTRON THREAD LIMITED, a British Company, of 1, Albany Street, in the County of London, and HARRY CLARKE WESLEY, a British Subject, of the aforesaid Company's Works, at St. Mary's Mills, Leicester, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly

described and ascertained in and by the following statement:—

This invention comprises improvements in and relating to a chin strap for a helmet or the like and more particularly is concerned with the method and means whereby the chin strap is adjustably connected to the helmet.

The object of the present invention is

to dispense with, as far as possible, metal parts such as the closed links hitherto commonly employed for connecting a chin strap to a helmet and also the metal buckle or slide hitherto commonly provided as a means for adjusting the length of the strap, this being desirable particularly in circumstances where the availability of such metal parts is restricted or even ceases as occasioned by the exigencies of war.

In dispensing with the aforesaid metal parts, it is of course, desirable to retain the facility for adjusting the strap in relation to the helmet to regulate it to the desirable fit to the individual wearer, and it is a further object of this invention to provide a construction embodying arrangements for permitting such adjustment.

According to this invention a chin strap for a helmet or the like comprises a length of elastic or non-elastic webbing each end of which is secured to an extension tab of suitable material such as canvas reinforced rubber sheet or leather of convenient size and shape to present a plurality of slits or slots disposed within the superficial area of the tab.

Alternatively the chin strap comprises a length of sheet rubber preferably of a particularly tough nature, and the slits or slots are disposed directly in the ends thereof.

The direction in which the slits or slots extend within the superficial area of the tabs or the ends of the all rubber strap is dependent somewhat on the nature of the arrangements for attachment of the strap to the helmet as hereinafter described.

In one case the slits or slots are arranged to extend transverse of the length of the strap or some of the slits or slots extend transversely and some extend at an angle, for example approximately 45 degrees to the longitudinal edge of the strap. The slits or slots are mutually spaced lengthwise of the strap.

Thus, by means of a selected slit or slot each tab or strap end may be detachably engaged with a lug or hook part secured to or integral with and extending internally from, the inner adjacent wall of the helmet.

Use of the slits or slots extending transverse of the strap position the latter for engagement beneath the chin of the wearer and where slits or slots arranged at an angle are provided engagement of these with the lug or hook part on the helmet, position the strap for wear at the back of the head.

In the second case the slits or slots are arranged to extend and are spaced in

pairs lengthwise of the strap or some of the slits or slots are thus arranged and extend lengthwise of the strap and some extend at an angle, for example, approximately 45 degrees to the edge of the strap.

The strap is detachably secured to the helmet by use of a securing bar which may consist of a short length of suitable gauge wire which is employed in conjunction with the slits or slots and a tubular lug or closed eye secured to or integral with, and extending internally from the inner adjacent wall of the helmet.

The arrangement is that the chin strap is positioned so that the tubular lug or the like is in alignment with a pair of slits or slots and displaces the material between the slits or slots so that the latter are opened and the securing bar can be inserted through the slits or slots and the tubular lug or the like, to thus effect the attachment of the strap to the helmet.

One or both ends of the securing bar may be bent to embrace the side or sides of the tab, to give support and security.

It will be apparent that by varying the selected pair of slits or slots for attachment by the securing bar to the lug or the like, there is obtained an adjustment of the strap with respect to its "fit" around the chin of the wearer.

In a modified arrangement each extension tab, or in the case of an all rubber strap hereinbefore mentioned, each end thereof, is provided with a plurality of holes disposed within its superficial area and attachment to the helmet is by engagement of the tab, or strap end, by one of these holes, with a stud carried by means such as a tab secured to the helmet as by riveting.

The holes are spaced lengthwise of the tab or strap end, to provide for adjustment of the effective length of the strap.

In order that the invention may be more clearly understood and readily carried into practical effect, reference is made in further describing same to the accompanying drawings wherein:—

Fig. 1 is a face view of the two end parts of a chin strap constructed in accordance with this invention.

Figs. 2, 3, and 4 are views similar to that in Figure 1, and illustrating modifications in the strap construction.

Fig. 5 is a drawing illustrating a helmet in wear with the chin strap in position beneath the wearer's chin.

Fig. 6 is a view similar to that in Figure 5 but showing the strap in position at the back of the head.

Fig. 7 is a sectional view of a portion of a helmet showing the lug with which the chin strap may be engaged by means of the slits or slots.

Fig. 8 is a perspective view of a portion of a helmet showing the tab in engagement with the lug shown in Figure 7 by way of one of the slits or slots.

5 Figs. 9, 10, 11 and 12 are views similar to that in Figure 1 and illustrating modifications in the arrangement of the slits or slots.

10 Fig. 13 is a view of one of the strap ends shown in Figure 9 showing a securing bar in position.

Fig. 14 is a fragmentary sectional view of a helmet showing the attachment of the chin strap tab thereto.

15 Fig. 15 is a side view of a helmet in which is illustrated a modified method of attachment of the chin strap thereto.

20 Referring to the drawings the major length of the chin strap in accordance with this invention consists of webbing 1 (Figure 1) which is preferably elastic and to which is secured extension tabs 2 by means such as stitching as at 3.

25 The extension tabs 2 are provided from sheet material consisting of canvas sandwiched between external layers of rubber, or pieces of leather may be used.

30 Slits or slots 4 are located in the superficial area and as shown extend transverse of the length of the strap and are spaced lengthwise of the strap.

35 In Figure 2, the construction is simplified in that the strap ends 2a containing the slits or slots are integral with the remainder of the strap and the whole consists of sheet rubber which is preferably of a particularly tough nature.

40 Figures 3 and 4 illustrate constructions similar to those shown in Figure 1 and 2 respectively but with the addition of slits or slots 4a extending at an angle which approximates 45° to the longitudinal edge of the strap or may be slightly more than 45°.

45 By provision of these slits or slots 4, 4a, which permit engagement of the strap end or the tab at each end of the strap, with a lug or hook on the helmet 6, the latter may be worn with the strap as shown in Figure 5 or as shown in Figure 6.

50 In Figures 7 and 8 is illustrated the lug or hook 5 with which by means of one of the slits or slots the tab 2 or the end 2a is engaged, the lug or hook 5 being positioned as shown to extend internally from the inner adjacent wall of the helmet 6.

55 Instead of attaching the strap by engagement of the lug or hook 5 in one of the slits or slots 4 the latter may be arranged to extend and are spaced in pairs lengthwise of the strap as shown in any of the constructions illustrated in Figures 9, 60 10, 11 and 12 which show the same con-

struction of strap as Figures 1, 2, 3 and 4 but with this modified arrangement of the slits or slots 4.

70 This method of attachment is applicable to where the part on the helmet consists of a tubular lug or closed eye with which co-operates a securing bar 7 shown in Figure 13 the arrangement being as in Figure 14 where the chin strap tab 2 is positioned so that the tubular lug or closed eye 8 is in alignment with a pair of slits or slots 4 (Figure 13) and dis- 75 places the tab material between the slits or slots so that the latter are opened and the securing bar 7 can be inserted through the slits or slots 4 and the tubular lug or closed eye 8 to thus effect the attachment of the strap to the helmet.

80 In Figure 15 is illustrated a further modified method of attachment of the strap 1 to the helmet 6 where the tab 2 is provided with a plurality of holes 9 disposed within its superficial area and attachment to the helmet is by engage- 85 ment of the tab by one of these holes with a stud 10 carried by a tab 11 secured to the helmet 6 by riveting 12.

90 The spacing of the holes lengthwise of the tab 2 provides for adjustment of the effective length of the whole strap and this modification may, of course, be 95 equally applied to where the strap is of tough rubber throughout, the holes being in the strap ends.

100 Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. A chin strap for a helmet or the like 105 comprising a length of elastic or non-elastic webbing each end of which is secured to an extension tab of suitable material such as canvas reinforced rubber sheet or leather of convenient size and 110 shape to present a plurality of slits or slots disposed within the superficial area of the tab.

2. A chin strap for a helmet or the like 115 comprising a length of sheet rubber, preferably of a particularly tough nature, the ends of which have a plurality of slits or slots disposed within the superficial area thereof.

3. A chin strap according to either of 120 Claims 1 or 2 wherein said slits or slots extend transverse of the length of the strap and are mutually spaced lengthwise of the strap.

4. A chin strap according to either of 125 Claims 1 or 2 wherein some of said slits or slots are arranged to extend transverse of the length of the strap and are mutually spaced lengthwise of the strap and others are arranged to extend at an angle for 130

example approximately 45 degrees to the longitudinal edge of the strap.

5 5. A chin strap according to either of Claims 1 or 2 wherein said slits or slots are arranged to extend and are spaced in pairs, lengthwise of the strap.

10 6. A chin strap according to either of Claims 1 or 2 wherein some of said slits or slots are arranged to extend and are spaced in pairs lengthwise of the strap and others are arranged to extend at an angle, for example, approximately 45 degrees, to the longitudinal edge of the strap.

15 7. A chin strap for a helmet or the like comprising a length of elastic or non-elastic webbing each end of which is secured to an extension tab of suitable material such as canvas reinforced rubber
20 sheet or leather of convenient size and shape to present a plurality of holes disposed within its superficial area and spaced lengthwise of the tab, whereby attachment to the helmet is by engage-

ment of the tab, by one of these holes with a stud carried by means such as a second tab secured to the helmet as by riveting. 25

8. A chin strap for a helmet or the like comprising a length of sheet rubber, preferably of a particularly tough nature, the ends of which have a plurality of holes disposed within the superficial area and spaced lengthwise of the tab whereby attachment to the helmet is by engagement of the strap end, by one of these holes, with a stud carried by means such as a tab secured to the helmet as by riveting. 30 35

9. The improved chin strap for a helmet or the like substantially as described. 40

10. The improved chin strap for a helmet or the like substantially as described with reference to the accompanying drawings. 45

Dated the 13th day of January, 1942.

M. F. COOP

Acting for the Applicants.

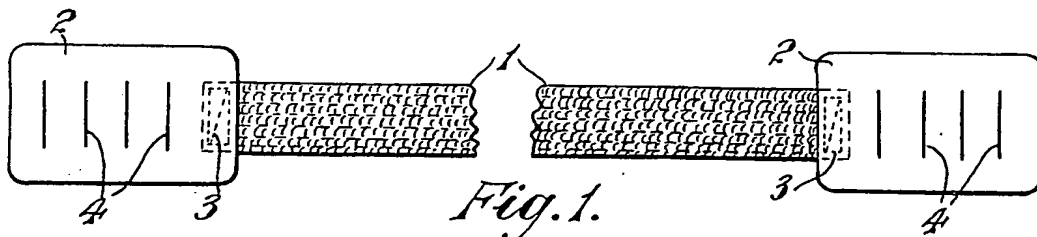


Fig. 1.

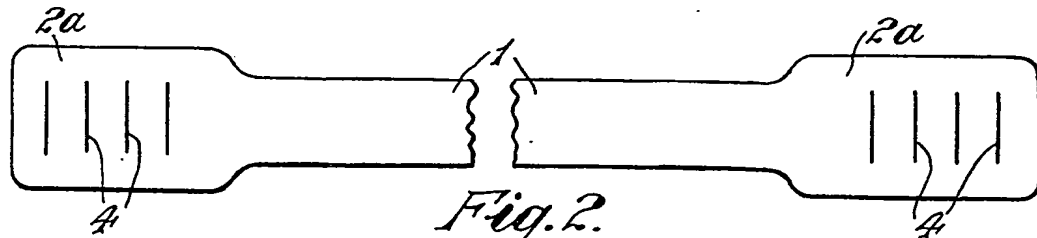


Fig. 2.

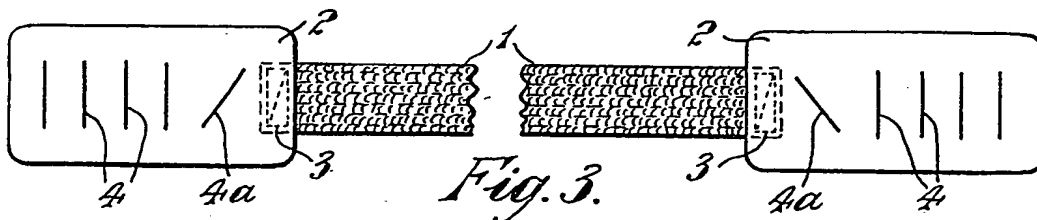


Fig. 3.

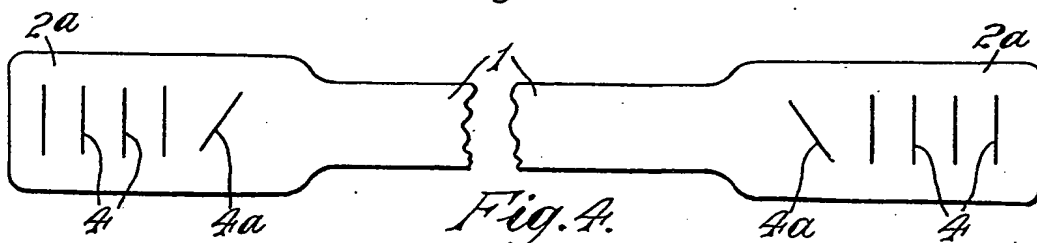


Fig. 4.

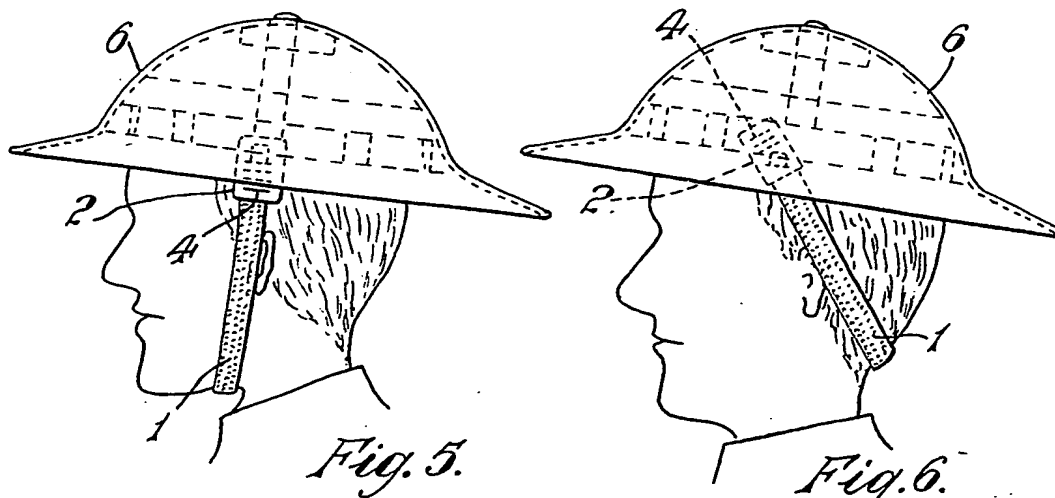


Fig. 5.

Fig. 6.

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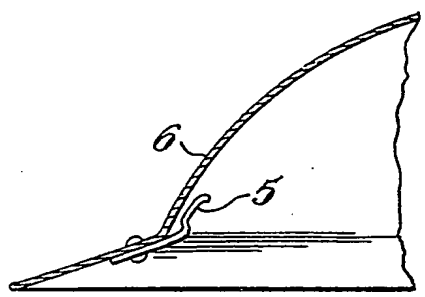


Fig. 7.

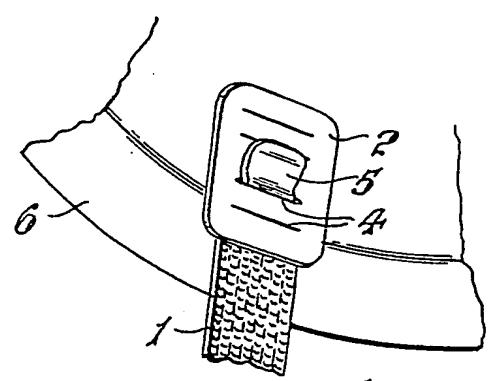


Fig. 8.

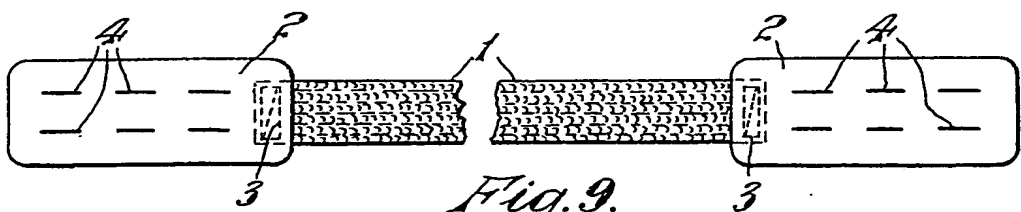


Fig. 9.

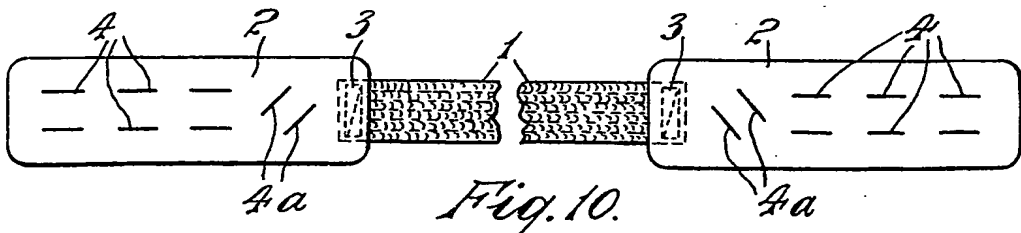


Fig. 10.

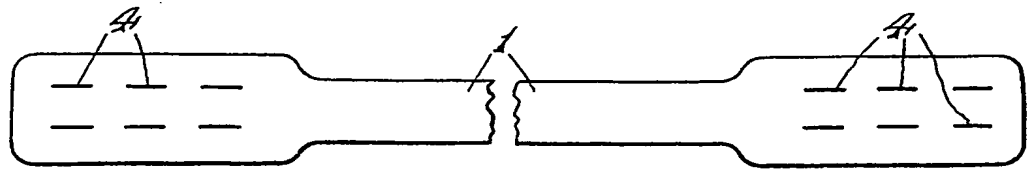


Fig. 11.

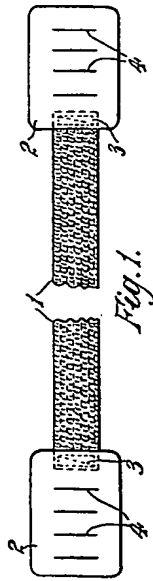


Fig. 1.

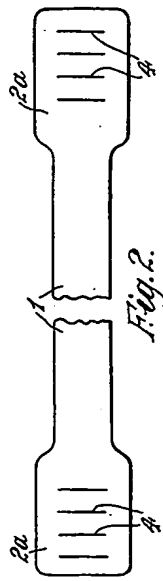


Fig. 2.

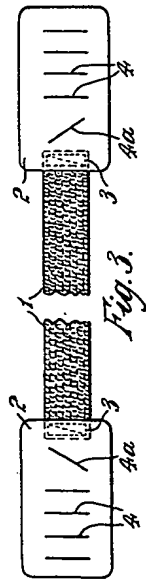


Fig. 3.

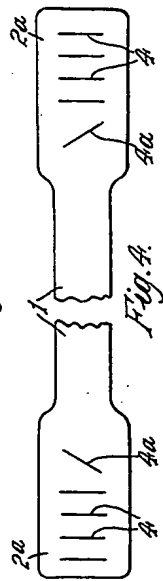


Fig. 4.

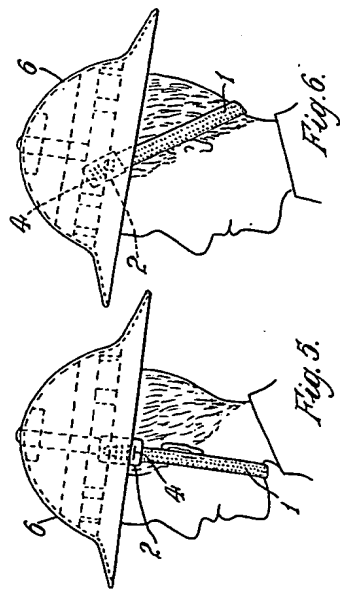


Fig. 5.

Fig. 6.

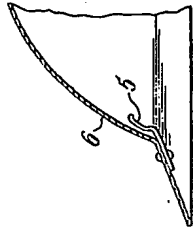


Fig. 7.

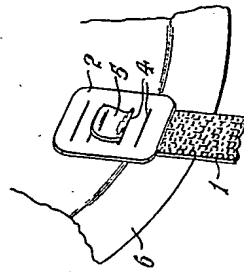


Fig. 8.

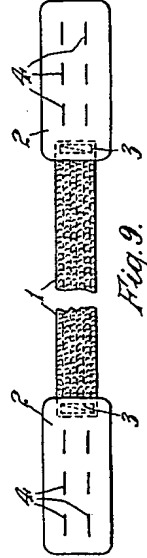


Fig. 9.

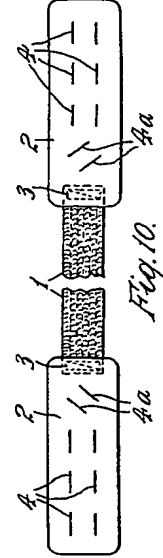


Fig. 10.

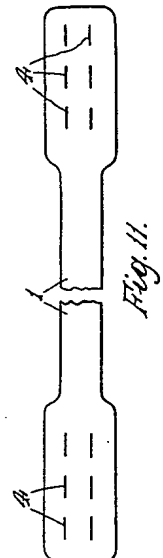


Fig. 11.

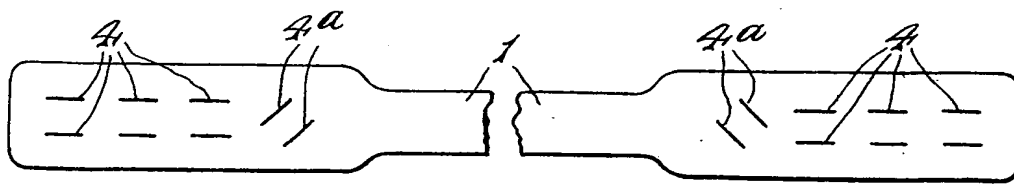


Fig. 12.

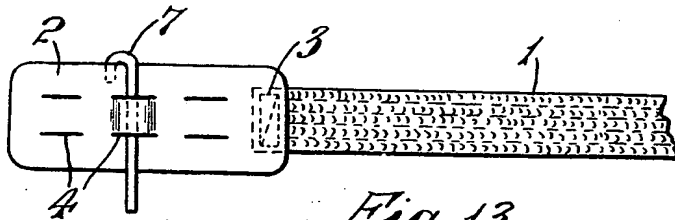


Fig. 13.

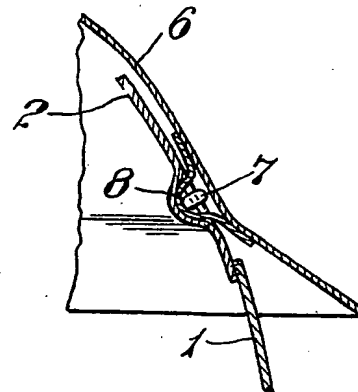


Fig. 14.

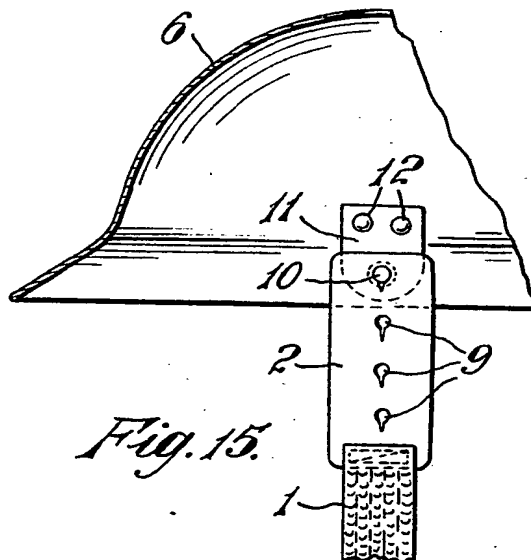


Fig. 15.

[This Drawing is a reproduction of the Original on a reduced scale.]